

Monthly Activity Report

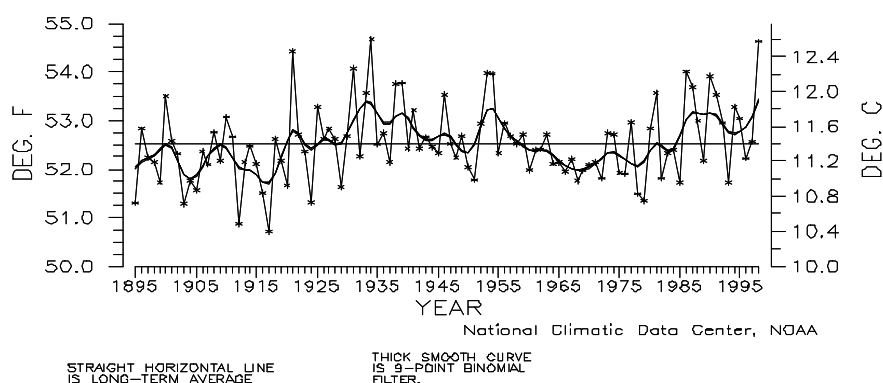
December 1998

National Climatic Data Center

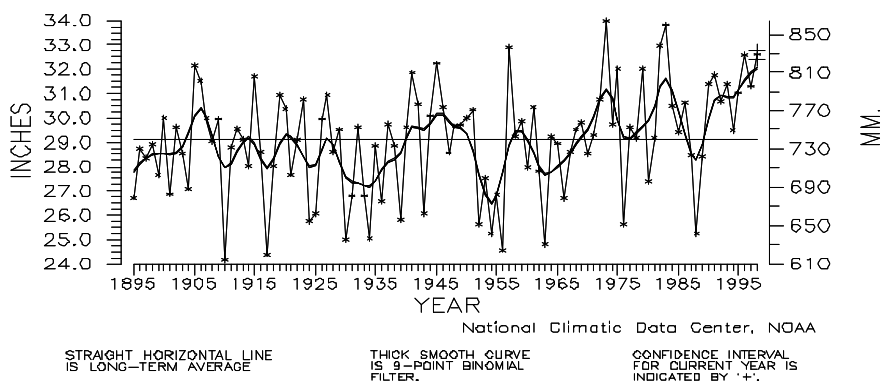
A National Resource for
Climate Information



U.S. NATIONAL TEMPERATURE
JANUARY–DECEMBER, 1895–1998



U.S. NATIONAL PRECIPITATION
JANUARY–DECEMBER, 1895–1998



Preliminary temperature data indicate that January–December 1998 was the second warmest year since records began in 1895. Nearly 75 percent of the country averaged much warmer than normal, while nearly zero percent of the country averaged much cooler than normal.

Preliminary precipitation data indicate that January–December 1998 was the fifth wettest year since records began in 1895. Over 22 percent of the country was much wetter than normal, while less than two percent of the country was much drier than normal.

DIRECTOR'S HIGHLIGHTS

NCDC Makes Web Changes in Accordance with WMO Resolution 40

On December 15, 1998, the National Climatic Data Center (NCDC) implemented changes to its Web system to reflect the National Oceanic and Atmospheric Administration's policy regarding the World Meteorological Organization's (WMO) Resolution 40. The policy requires that on-line users of data sets containing "additional data and products," as defined by WMO, be notified that the data cannot be redistributed for commercial purposes. A decision was made to block on-line access to these data sets from users residing in 29 countries which have listed these "additional data and products." These users are notified that they may contact NCDC for possible off-line purchase of the data. Other users (not in these countries) must hit an "I agree" icon before proceeding to the Web page containing the data. During the first two days after implementation, over 1,000 users accessed the Web pages of the two data sets presently affected: Global Historical Climate Network and Global Summary of Day. NCDC is maintaining a log file with the IP addresses of these users, and an E-mail folder with any comments by affected users.

Director Presented Gold Medal Award

Thomas R. Karl, National Climatic Data Center (NCDC) Director, received the U.S. Department of Commerce Gold Medal, the Department's highest honorary award, at a ceremony held December 10th in Washington, D.C. The award was presented by Commerce Secretary William Daley. Tom was cited for his pioneering work in the field of global warming and its effect

on extreme weather and climate events.

NCDC Employee Presented Bronze Medal Award

Dan Manns, of the National Climatic Data Center, received the U.S. Department of Commerce Bronze Medal Award for his work on the NOAA Server Project. Dan was a member of the team that designed and developed the NOAA Server system. This system allows users to search for data sets across NOAA, read metadata, browse, graph and retrieve data sets from any of the NOAA offices.

NCDC Employee Presented NOAA Administrator's Award

Dee Dee Anders, of the National Climatic Data Center, received the NOAA Administrator's Award for her work in the development, implementation, and administration of NOAA's first fully automated on-line store. This system was a major milestone for the National Oceanic and Atmospheric Administration and usage continues to grow. Dee Dee received her award at a ceremony in Silver Spring, MD, on December 4, 1998. She is continuing to work on enhancements and additions to the store.

NCDC Reorganization

The Eastern Area Support Center gave their concurrence to the National Climatic Data Center's (NCDC) reorganization. NCDC has forwarded the reorganization package to the National Environmental Satellite, Data, and Information Services for approval.

CLIMATE DATA AND INFORMATION SERVICES

✦ Database Development

ESDIM Project for Integrated Hourly Surface Database Proceeds

Good progress was made during December on the National Climatic Data Center's (NCDC) Environmental Sciences Data Information Management (ESDIM) project to build an integrated hourly surface database. The programming to convert the surface hourly database (TD3280) to Greenwich Mean Time (GMT) was completed except for final testing. TD3280 data will be converted to GMT and then put into a normalized observational format before loading to Oracle. The conversion to normalized observational format programming is underway as well as cross-referencing of the Air Weather Service Master Station Catalog versus the NCDC station history, which will be used for the final merge of the integrated database.

✦ Data and Information Distribution

Monthly Publication Available on CD-ROM

The National Climatic Data Center, working with the Government Printing Office (GPO), has developed a CD-ROM which contains the National Climatic Data Center's five monthly serial publications: Hourly Precipitation Data, Climatological Data, Local Climatological Data, Storm Data, and Monthly Climate Data for the World. Each CD-ROM will have all the

publications for a three-month calendar period beginning with January - March 1998. The CD-ROM will replace the paper copies currently distributed to the Federal Depository Library System and the Library of Congress. The January - March 1998 period CD-ROM has been sent to GPO for production and distribution. These publications are also available on the NOAA National Data Centers (NNDC) On-Line Store via the Worldwide Web.

Rescuing Historical Data, the Scanning Continues

The conversion of paper records containing surface weather observations to digital images continues at full production. To date, the National Climatic Data Center (NCDC) has shipped 22,222 boxes of records to the West Virginia. The contractor has returned 11,464 boxes, and return shipments continue to be made weekly. NCDC has received back 962 CD-ROMs containing some 7.0 million images. The Orkand quality assurance process has completed 895 CDs and the NCDC quality review process has completed 844 CDs. The flow of documents to the contractor has all but stopped as the contract production goal of 9.4 million records has been reached.

Customer Service Operations

Demand continued to grow for National Climatic Data Center (NCDC) on-line data sets available on the World Wide Web. A total of 22,000 customers contacted the NCDC via the NNDC On-Line Data Store Web site and accessed 31 gigabytes of

climate data. On-Line Store revenue for December 1998 represented a 14 percent increase from the previous month. The growing customer preference for on-line data continues.

NCDC Provides International Data for ASHRAE Research

The National Climatic Data Center (NCDC) provided hourly surface data from eight international stations to a researcher studying solar radiation models. The data will be evaluated for use in an American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) contract, which involves long-term data for 200 stations. In particular, the snow depth and cloud data from the observations are being used in the solar radiation models being tested. The long-term goal is to model solar radiation globally for 200 locations.

McIDAS Operations and Satellite Data

The McIDAS-X software version 7.5 upgrade is now available from the Space Science and Engineering Center (SSEC) at the University of Wisconsin. SSEC personnel are scheduled to visit the National Climatic Data Center in mid-January to install upgrades to the Geostationary Satellite Archive System (GSAS) on the Earthview workstation. Prior to this installation, the operating system on Earthview must be made Y2K compliant. The Tornado workstation also must be made Y2K compliant prior to the McIDAS-X upgrades.

NNDC On-line Store Update

The National Climatic Data Center (NCDC) finished programming that will allow the Customer Order Management Processing System (COMPS) to ingest on-line orders into the COMPS order system for processing. A few test orders, which appear to be correct, have been ingested and

further testing of the process will continue including ingesting of on-line/off-line orders. The next step in the On-line Store programming will be to complete the existing on-line/off-line module along with programming on-line/on-line module for ingesting into COMPS. Annual Climatological Summaries were added as a product and subscription item to the store during December.

NCEP Analysis Charts on the Web

The National Climatic Data Center has completed the work necessary for placing select National Centers for Environmental Prediction (NCEP) charts on the NOAA National Data Centers On-Line Store for access via the Worldwide Web.

NEXRAD Implementation of Build-10

Throughout December, the processing of Next Generation Weather Radar (NEXRAD) Level II tapes has been closely monitored, especially tapes from sites that have installed the newest level of the National Weather Service operating system Build-10. Approximately 37 radar sites have sent tapes to the National Climatic Data Center (NCDC) containing Build-10 data.

◆ Research Customer Service Group Requests

NCDC Data Used for Drought Analysis

Researchers at the Virginia State Climatologist office obtained historical monthly and annual precipitation for selected Virginia stations beginning in the 1830's. Due to the very dry conditions which have prevailed since early summer, the state of Virginia has activated the State Drought Monitoring Task Force. This group will monitor current conditions and put them in climatological perspective. The National Climatic Data Center (NCDC) supplied the team with historical (pre-1890's) precipitation records for

Virginia. This data will be used by state officials for drought related decision making purposes.

♦ Satellite Data Requests

State of Louisiana Saves Millions of Dollars

The Louisiana Department of Transportation was recently acquitted of negligence regarding an automobile accident that occurred several years ago. The department asked Dr. Oscar Huh of the Louisiana State University's Earth Scan Lab to defend the state in a recent trial by providing expert testimony using surface and satellite imagery. The satellite imagery was prepared according to specific guidelines set by Dr. Huh. The surface data and satellite data both provided proof that intense rainfall occurred at the time of the accident, which was likely the key factor in the accident. The state was absolved of negligence.

Search for Downed Plane

A Physical Scientist from the Canadian Center for Remote Sensing is working with personnel from the National Climatic Data Center's (NCDC) Satellite Services Group and a private firm from the United States to help locate a lost aircraft. The airplane, operated by the World Gospel Mission, was carrying several adults and children onboard and is believed to have gone down in the jungles of Bolivia. No signals were received from onboard emergency locator transmitters, and Bolivian search and rescue operations have not been successful. Satellite images from GOES-8 will be used to identify any local storms in the area where the pilot was last reported, and to chart any possible course changes the pilot may have made to avoid these storms.

High Resolution Upper Air Data

The National Climatic Data Center provided the National Weather Service (NWS) Office of Systems Operations with high resolution Microart Upper Air Data for all of calendar year 1996. The data was delivered digitally via ftp and on CD-

ROM. The NWS is using these data to develop specifications for the NWS Radiosonde Replacement System.

♦ Requests from News Media

NCDC Provides Information for NBC Nightly News

The National Climatic Data Center was contacted December 3rd by NBC Nightly News to provide climatic information for that evening's broadcast. NBC was interested in the recent warmth from a historical perspective. Information concerning the 10 to 20 daily record high temperatures that had been set each day for the previous week, with several cities establishing all-time monthly records for December, was given. Most of the record temperatures were concentrated in the upper Midwest and Ohio Valley regions, but the large departures from normal were expanding into the northeast and southeast. The area west of the Rockies had experienced more seasonal temperatures

♦ Regional Climate Centers

Regional Climate Center Activities

The development of a full Customer Service Plan is complete. The goal is to have the customer serving functions of the National Climatic Data Center (NCDC) and the Regional Climate Centers (RCC) to be fully integrated within three years. The development of an NCDC/RCC Management Plan covering the period 1999-2003 is now underway. The plan will address the minimal requirements that must be met by each RCC in order to be considered a National Oceanic and Atmospheric Administration RCC.

Plans have been completed to conduct a full review of the State Climatologist Program. Several State Climatologists, a former State Climatologist, and a Regional Climate Center Director will participate in the first discussion to be held January 8-9, 1999. The goal is to have this review completed by late summer 1999.

SCIENTIFIC AND PROFESSIONAL ACTIVITIES

♦ Working Groups/ Committees/Meetings

NCDC Participates at NNDC Exhibit

The National Climatic Data Center (NCDC), as part of the NOAA National Data Center (NNDC), participated at the American Geophysical Union 1998 Annual Fall Meeting held in San Francisco, CA, December 6-10, 1998. This conference was the official debut of the new NOAA/NNDC exhibit which features the three NOAA Data Centers: the National Climatic Data Center (NCDC), the National Geophysical Data Center (NGDC), and the National Oceanographic Data Center (NODC). There were more than 7,300 scientists attending from atmospheric, oceanic, hydrologic, and space and planetary sciences. Those who attended the exhibit were very impressed with the presentation and variety of climate data and information available via NCDC's Web site. Attendees were also impressed with the amount of additional off-line data and information available via CD-ROM and other media.

♦ Publications

NNDC and NCDC Promotional Materials

Several NOAA National Data Center (NNDC) promotional materials were updated during the month. These included an NNDC 1999 environmental science cube, an NNDC bookmark, and a brochure. In addition, the annual update of NCDC's "Product and Services Guide" is nearly complete. All of these publications will be available for use at various conferences during the upcoming year, including the American Meteorological Society meeting in January 1999.

♦ Interactions with NOAA Line Offices

NCDC Works with the CPC on 1998 Summary

The National Climatic Data Center (NCDC) coordinated with the Climate Prediction Center (CPC) on a summary of major weather events in 1998. Large portions of the summary were based on NCDC input. A press release and Web page from CPC accompanied the release of the report.

NWS Office Uses NCDC's Cooperative Summary of the Day CD-ROM

A researcher with the National Weather Service (NWS) in Marquette, MI, is compiling all the available daily snowfall data for the upper peninsula of Michigan as part of a research project. The researcher downloaded daily snowfall for a few dozen Michigan stations for the 1997-1998 snow season as part of the snow depth climatology project, and may also display the data in a graphical map format via the Web. A large part of the economy in that area of the state is dependent on winter sports, and a detailed snow climatology is needed.

Climate Anomalies

National Climatic Data Center personnel provided information to the press and the National Oceanic and Atmospheric Administration Public Affairs Office regarding the anomalously warm, dry fall in the Eastern U.S. and cold weather in Europe. Climate perspectives of both National and Global scope are posted to the NCDC Web site (www.ncdc.noaa.gov) on a monthly basis.

EMPLOYEE ACTIVITIES

♦ EEO and Community Outreach

Invited Speaker at Area High School

Tom Ross of the National Climatic Data Center (NCDC) was an invited speaker at Brevard High School in Brevard, NC, on December 18th. Tom presented information on climate research activities and product and services available from NCDC. He focused on natural disasters, climate impacts, and career opportunities available in meteorology and climatology.

♦ Training

Introduction to C Programming

Curt Benner and Kathy Kidwell of the National

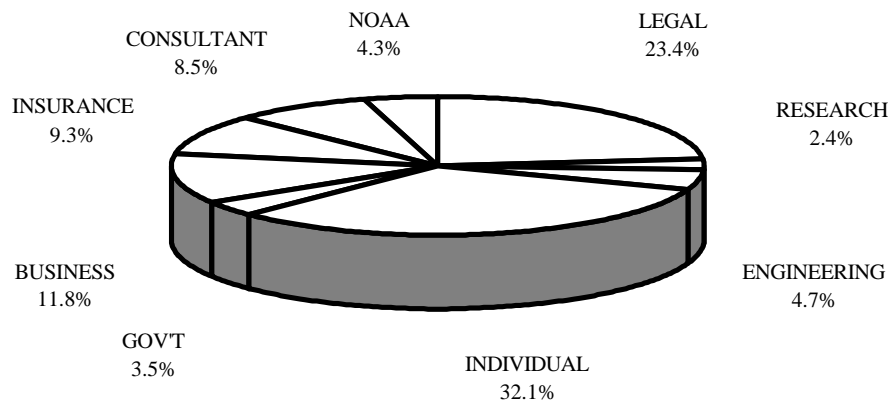
Climatic Data Center attended a five-day class on "Introduction to C Programming" that was given by the U.S. Department of Agriculture Graduate School in Washington, D.C., from December 14-18, 1998.

Asheville Women's Conference Attended

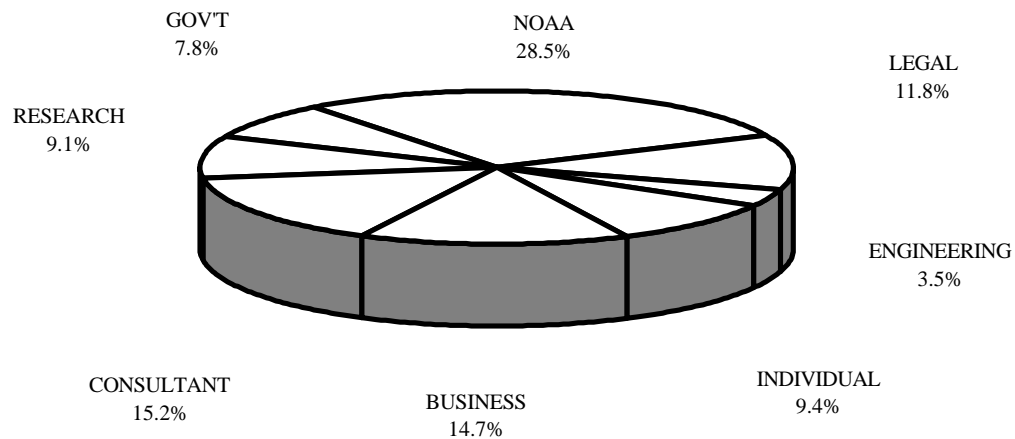
Jo Ann Sceizina of the National Climatic Data Center attended the Asheville Women's Conference December 17th. Session topics included: Communication Skills That Matter; Innovative Thinking; Stress Relief at Home and Work; Managing Multiple Priorities in a Hurry-Up World; Projecting a Powerful, Positive Image; and Shifting Gears in a Changing World.

The following charts and graphs show the latest National Climatic Data Center user and data statistics.

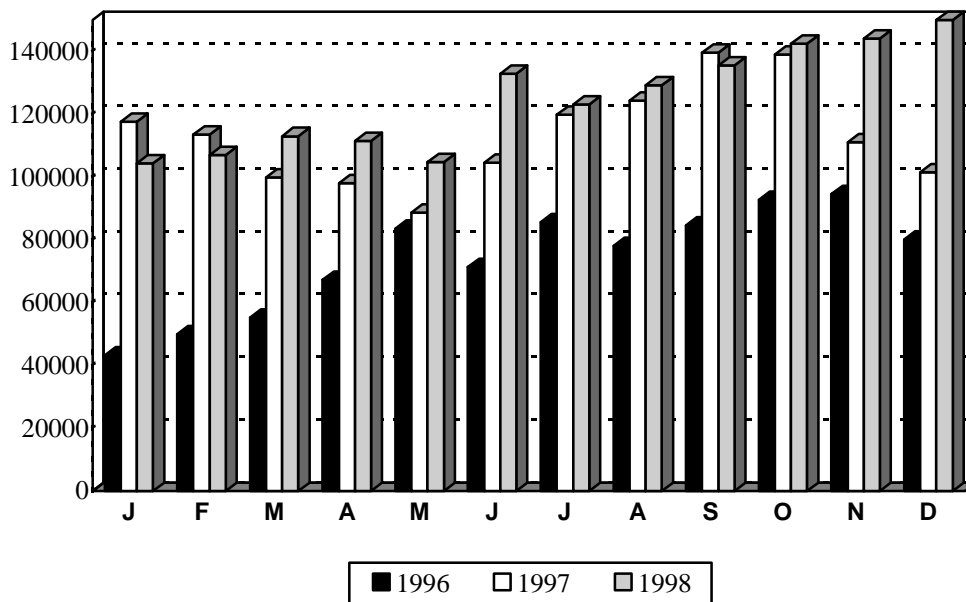
Customer Profile Based on Orders



Customer Profile Based on Order Cost



NCDC On-Line Users



NCDC Off-Line Customer Contacts

